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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

WRITER'S DIRECT DIAL NUMBER  
(202) 828-7506

FACSIMILE  
(202) 429-7049

February 8, 1996

**HAND DELIVERY**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, NW  
Washington, DC 20554

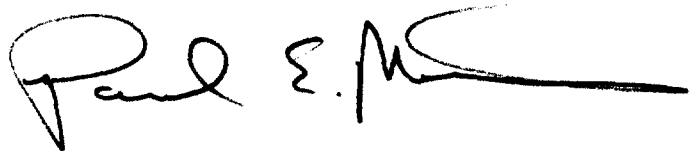
Re: CC Docket No. 92-297  
Ex Parte Presentation

Dear Mr. Caton:

Representatives of Texas Instruments, Inc., talked via telephone today with Mr. Thomas Tycz of the Commission's International Bureau, and met with Messrs. Donald Gips and Greg Rosston of the Commission's Office of Plans and Policies and Messrs. Robert James and David Wye of the Wireless Telecommunications Bureau on matters related to the pending proceeding in CC Docket No. 92-297. Texas Instruments, Inc., was represented by Gene Robinson, Bob Pettit, and Paul Misener. Band sharing plans for the 28 GHz band were discussed. In addition, the attached correspondence was provided to Mr. Wye.

An original and two copies of this letter are submitted. A copy of this letter, without attachment, is being sent simultaneously to Messrs. Tycz, Gips, Rosston, James, and Wye.

Respectfully submitted,



Paul E. Misener  
Counsel for Texas Instruments, Inc.

Attachment

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William F. Caton

February 8, 1996

Page 2

cc     Mr. Thomas Tycz (w/o attachments)  
         Mr. Donald Gips (w/o attachments)  
         Mr. Gregory Rosston (w/o attachments)  
         Mr. Robert James (w/o attachments)  
         Mr. David Wye (w/o attachments)

DUPLICATE

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**BY HAND AND VIA FACSIMILE**

Mr. David P. Wye  
Telecommunications Policy Analyst  
Wireless Telecommunications Bureau  
Federal Communications Commission  
Room 5002  
2025 M Street, NW  
Washington, DC 20054

re: CC Docket 92-297  
28 GHz Spectrum Band Plans

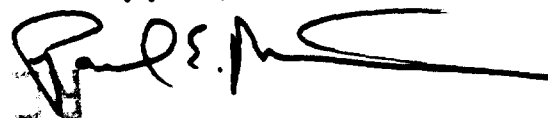
Dear David:

Texas Instruments continues to support the FCC staff's proposed band plan Option 3 as the best solution because each service in the band would be allocated sufficient bandwidth under acceptable sharing conditions.

In response to your questions, however, we have attached a summary of the FCC rules necessary for an alternative solution -- band plan Option 2 -- to enable a viable local multipoint distribution service (LMDS). Without such rules, Option 2 would not provide subscriber link spectrum of adequate quality to support the interactive aspect of LMDS. Without interactivity, LMDS would not be useful for telephony, Internet connection, or video on demand and, of course, LMDS auction revenues would be diminished greatly.

If you ~~have~~ have any questions, please feel free to call me or Bob Pettit at 202-429-7019 or Gene Robinson at 214-917-6202.

Sincerely yours,



Paul E. Misener  
Counsel for Texas Instruments, Inc.

Attachment

96. 11 15 11 8 83

TELECOMMUNICATIONS

## **FCC Rules Necessary Under 28 GHz Band Plan Option 2**

### **§101. LMDS subscriber transceivers transmitting in the 29.1-29.25 GHz Band**

- 1) LMDS subscriber transceivers operating in the 29.1-29.25 GHz band:
  - a) shall operate at a peak EIRP per carrier of 14 dBW/MHz in clear air, and shall reduce its EIRP at distances less than the maximum distance from the hub at which a subscriber transceiver is located in accordance with the following formula:

$$\text{EIRP(dBW/MHz)} = 14 \text{ dBW/MHz} + 20 \log d/D$$

where d = transceiver distance to hub

D = maximum transceiver distance to hub

the peak EIRP derived from this formula may be exceeded in cases where link propagation attenuation exceeds the clear air value and only to the extent that the link is impaired plus a 1 dB margin.

- b) shall not exceed the relative peak antenna gain described in Figure X.

See Attached Figure X (modified from staff proposal).

- c) each CPE shall automatically inhibit its transmissions if it is not receiving a signalling/communication channel from its associated hub.

### **LMDS hub stations receiving in the 29.1-29.25 GHz Band:**

- a) shall be capable of providing automatic power control to LMDS subscriber transceivers to ensure that the EIRP defined in Section X Part (a) is not exceeded by more than 1 dB.

## **Other Rules**

- 1) The Commission must not impose power spectral density or subscriber terminal density limitations.
- 2) The FCC must not impose differential hub to subscriber antenna height restrictions.
- 3) Iridium gateways should be required to transmit at least 45.2 dBW EIRP (2 dB more power than the stated 43.2 dBW; this will provided an additional 11 dB C/I margin) but not more than 80.0 dBW EIRP.

[Redline Version]

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# CPE Antenna Mask

Elevation and Azimuth

